

Inner Peace for Busy People

From Stress to Strength



A Basic Definition of Mindfulness

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Mindfulness meditation is the intention to stay focused on the moment-to-moment flow of experience in an open, curious, observant state that bypasses judgment. It is a “biological process that promotes health-a form of brain hygiene-not a religion.” (Daniel Siegel, MD)

Concentration Meditation

Concentration meditation is the intention to focus on a repetitive stimulus like a word, a phrase, or the breath. It trains attention and elicits the relaxation response. It is common to different religious traditions including Christianity, Judaism, Islam, and eastern traditions such as Buddhism and Hinduism but is used medically in a non-religious context.

Centering Prayer

Centering prayer is a form of Christian-based meditation that focuses on the intention and willingness to experience the presence of God. A prayer word is used to focus attention on waiting for Divine Union, but the breath is not used as a form of focus as it is in mindfulness or concentration meditation.

Specialty Meditations

gTumo Yoga



Training Compassion

The Emory-Tibet Science Initiative

Lovingkindness meditation and lojong

in students (control vs meditation groups):

- Decreases reactivity to stress
- Decreases inflammation

Raison, Pace, et al *Psychoneuroendocrinology*, 2008; doi:
[10.1016/j.psyneuroendocrinology, 2008.08.011](https://doi.org/10.1016/j.psyneuroendocrinology.2008.08.011)

Training Compassion

Study of longterm meditators: Tibetan Buddhist monks, versus controls studied with fMRI

- Decreased stress
- Increased empathy
- Increase in happiness setpoint

A. Lutz et al Regulation of the Neural Circuitry of Emotion by Compassion Meditation. PLoS One 3 (3): e1897

The Miracle of Mindfulness

Our true home is in the present moment.

To live in the present moment is a miracle.

The miracle is not to walk on water.

The miracle is to walk on the green earth in the present moment, to appreciate the peace and beauty that are available now.

Peace is all around us and within us-

in the world and in nature-

and within us- in our bodies and our spirits.

Once we learn to touch this peace

we will be healed and transformed.

It is not a matter of faith.

It is a matter of practice.

-Thich Nhat Hanh

The Main Focus of Mindfulness is Transformation of Trait Affect

“The contemplative traditions from which commonly taught meditation practices have arisen are clear in identifying affective qualities as central targets of the contemplative practices (see Lutz, Dunne, & Davidson, 2007, for review). Kindness, compassion, and equanimity are all regarded as qualities that can be cultivated and enhanced through mental training. Indeed, the cognitive changes that are also hypothesized to occur with mental training, such as improvements in certain components of attention, are viewed in these traditions as building blocks and tools to facilitate the most important types of transformation, which are in the emotional realm (Dalai Lama & Ekman, 2008).”

Richard Davidson, 2010. *Empirical Explorations of Mindfulness: Conceptual and Methodological Conundrums*. *Emotion*, Vol. 10, No. 1, 8–11, American Psychological Association

An Essential Aspect of Mindfulness

“Mindfulness training can be hypothesized to change an individual’s relationship to his or her emotions so that they are not viewed as fundamental constituents of self, but rather as more fleeting phenomena that appear to the self.” –Richard Davidson, Ph.D.

Ibid, previous slide

Interpersonal Neurobiology

“The mind is an emergent, self-organizing process that shapes how energy and information move across time. ... The mind is not separate from our bodies or from our relationships-it both arises from them and regulates them.” –Daniel Siegel, MD

The Mindsight Institute

From Pocket Guide to Interpersonal Neurobiology: Integrative Handbook of the Mind. WW Norton and Company, 2012

Siegel: Monitor and Modify the Information Flow

Emotional regulation requires:

1. Monitoring one's affective state
2. Modifying the flow of energy “in a way that moves the system- body and relationships- toward wellbeing.”

This is called integration, which leads to health.

Approach and Integration

“People with mindful awareness training have a shift in their brains toward an “approach” state that allows them to move toward rather than away from challenging situations. This is the brain signature of resilience.”

-Dan Siegel, MD

“Health is based on a process called Integration” Siegel

Integrate “upstairs brain” (cortical areas) with “downstairs” brain (subcortical including body) and the verbal left hemisphere with the more affectively primitive right (anger, fear, rage).

Davidson refers to this as a “left shift.”

Balance minimizes rigidity on the one hand and chaos on the other.

Blessed are the flexible for they shall
not be bent out of shape



The Resilient Brain

“The amygdala is the region that sends out signals- be afraid, be depressed, be on your toes for signs of danger-and when those signals are going full blast it’s very hard to be resilient...So the prefrontal cortex basically says to the amygdala, ‘Quiet down!’ And when it’s able to do so, people are able to be resilient...*The activation of the left prefrontal cortex in a resilient person can be 30 times that of someone who isn’t resilient.*”

-Sharon Begley

Cognitive Neuroscience

Feelings and thoughts work together so that you can integrate the brain.

“by reframing your thoughts, by thinking about them in a different way you have dialed down the overactivity in what’s called a worry circuit.”

-Sharon Begley

The Calmer Downer Circuit

- GABA, gamma amino-butyric acid is an inhibitory neuropeptide made in the orbitomedial prefrontal cortex (the “upstairs brain”). When released it turns off the alarm raised by the amygdala and calms the “downstairs brain”-the subcortical areas-body, brainstem, and limbic areas.

Making the Shift

Strengthening the connection of the medial prefrontal cortex to the amygdala

- Mindfulness
- Mental training techniques (slogans, reframing, cognitive behavioral approaches)
- Exercise
- Breathing

Time to practice

- We are using the mind's "wheel of awareness" model of Dan Siegel, MD.
- "Picture a bicycle wheel with the hub at the center, and spokes radiating to the outer rim. The rim represents anything we can pay attention to, such as our thoughts and feelings, or our perceptions of the outside world, or the sensations from our body. The hub represents the inner place of the mind from which we become aware. The spokes represent how we direct our attention to a particular part of the rim. Our awareness resides in the hub and we focus on the various objects of our attention as points on the rim. The hub can be seen as a visual metaphor for our prefrontal cortex." P 89, paperback edition of *Mindsight: The New Science of Personal Transformation*, Bantam Books, 2011
- We will practice mindfulness meditation using Siegel's Mindful Awareness Exercise, on pages 89-92. This is the single best resource I know for the practice of mindfulness and the understanding of the cultivation of awareness that can calm down the amygdala, lead to the understanding that we are not our emotional storms, and cultivate the capacity to be observant, curious, and open minded.

Foundational Books

Concentration Meditation:

The Relaxation Response, Herbert Benson, MD

Mindfulness Meditation:

Full Catastrophe Living, Jon Kabat-Zinn, Ph.D.

Wherever You Go, There You Are. Jon Kabat-Zinn, Ph.D.

*Mindsight, Daniel J. Siegel, MD

Centering Prayer:

Open Mind, Open Heart, Fr. Thomas Keating

Centering Prayer and Inner Awakening, Rev. Dr. Cynthia Bourgeault

Foundational Programs and research resources

Richard Davidson, Ph.D. The Laboratory for Affective Neuroscience, UW at Madison (<http://psyphz.psych.wisc.edu/>). Hit the publications tab for full pdfs of research papers, many dealing with mindfulness.

John Kabat-Zinn, Ph.D. Mindfulness-Bases Stress Reduction Programs <http://w3.umassmed.edu/MBSR/public/searchmember.aspx>)

Benson-Henry Institute for Mind-Body Medicine. Programs, research, certificate trainings (<http://www.massgeneral.org/bhi/>)

Andrew Newberg, MD. God and the Brain. (<http://andrewnewberg.com/>)
Go to publications for pdfs of published research

UCLA Mindful Awareness Research Center (<http://marc.ucla.edu/>)
Programs, research, practitioners

Foundational research findings

- Benson, the relaxation response and the shift from sympathetic overactivity to parasympathetic activity.
- Brain research focusing on the limbic system, the prefrontal cortex, and the development of mindfulness, empathy, and compassion.
- Clinical psychological/psychiatric research indicating reduction in anxiety, depression, recurrence of depression (mindfulness), autonomic self-regulation, reduction in addictive behavior, a shift in brain function among practitioners “toward an ‘approach state’ that allows them to move toward rather than away from challenging situations. This is the brain signature of resilience.” (Dan Siegel, MD)
- Stress management
- Physical health and healing: Decline in stress-related symptoms, chronic pain, psoriasis, sleep disorders, immune disturbances, inflammatory disorders, and DNA breakage
- Increased ability to learn, enhanced creativity, healing and teaching presence